

and pupils, who gave the program of regular school activities that was very much appreciated.

Add to this the fact that the Training School was used for the demonstration of the use of achievement tests and intelligence tests which were placed with scholastic records to decide the question of credit for the summer in terms of possible promotion, and one gets a glimpse of a group of varied activities that it is hoped can be maintained and added to from year to year for the mutual benefit of Harrisonburg children and of the visiting teachers of the Summer Session of the Normal School.

VIII

MEASURE YOUR MIND

To set forth in non-technical fashion the principles of scientific measurement, especially the measurement of intelligence, and to put in convenient form a varied group of tests, were the purposes of the authors of *Measure Your Mind*; they have succeeded and their compilation includes numerous tests showing a great deal of ingenuity and capable of measuring a variety of mental capacities. Their book also contains valuable chapters bearing on the application of psychological tests, and their use in the Army, in education, and in industry.

It is particularly to the business man, to the employer of labor, and to the personnel division of the large corporation, that the publishers seem to expect its sale, but the book is of large value to the teacher, especially the one who has had no opportunity to make a technical study of tests and measurements.

One finds here thirty separate kinds of mental tests called by their authors Mentimeters. They differ from the Otis intelligence test and the Alpha and Beta tests used in the Army, their authors claim for them, chiefly in their flexibility. Flexibility is needed because "it is not probable that exact-

ly the same tests would select men of high intelligence in the graduate work of a university as would be needed to select the intelligent men in a logging camp in the wilds of Canada or our own Northwest."

A wide variety of uses to which the tests may be put is suggested. They may be used in the selection of clerical workers and of laborers in business and industry, in classifying school children according to their general intellectual power and ability to learn, and—would you believe it—in providing one's guests with social entertainment. Eight of the thirty tests have a somewhat definite bearing on strictly educational subjects such as spelling, reading, and handwriting; but the majority of the tests have to do with such things as naming analogies, threading mazes, completing sentences, detecting pictorial absurdities, naming opposites, and completing number relations.

For example, in testing for range of information one reads "The aorta originates in the head . . . feet . . . heart . . . Alps . . ." and places a check to indicate the correct answer. There are forty such sentences, increasing in difficulty until one comes to "A rhesus is a kind of fish . . . bird . . . animal . . . reptile . . ."

Score groupings for each test are given, as well as a key of correct answers in the appendix. It is a matter of four minutes to give the information test, and by determining the total number of correct answers the individual rating is obtained. For instance, the person of average mental ability has been found to get 11 to 23 correct answers on this test, while a score of 0 to 3 indicates inferior intelligence and a score of 31 to 40 indicates superior intelligence.

"Not acquired knowledge, but the ability to acquire knowledge" is what the authors state their Mentimeters will measure. The book is quite clear, and even the most hard-headed scoffer at the scientific measurement movement must needs be convinced by the illustrations and analogies offered. The following comparison is typical:

"The simplest way to measure the capacity of a circular tank is to pump it full of water and then measure the water as it is drawn off. But it would be absurd to con-

MEASURE YOUR MIND, by M. R. Trabue and Frank Parker Stockridge. Garden City, New York: Doubleday, Page & Co. 1920. 349 pages. (\$3.00).

tend that because there has never been any water pumped into the tank it is therefore impossible to determine how much water it would hold. And what the doctor of philosophy has got out of his university course is comparable to the water in the tank. The university may have assisted, and if its faculty were competent, undoubtedly did assist him in discovering earlier in life than he otherwise would have discovered the actual capacity of his mental tank. But there are probably as many men of equal mental capacity whose mental tanks have never been filled with the particular kind of intellectual fluid that the Ph. D. carries about with him, whose capacity there is no other means of measuring than by the application of mental tests based upon the known capacities of doctors of philosophy."

A discussion of some of our school problems and an attack on our common methods is not without a special interest to teachers, even if it expresses no entirely new thought. The authors claim that the abstract symbols and verbal ideas with which much of our schoolroom work is shot through are not grasped by a very large percentage of children. The notion that a boy has but to stay in school if he wishes to become president is an old one, and educators are still making the error of implying that it is the inferior people who are forced out of school. The authors are undoubtedly right in asserting that "the mind of a man whose interests lie in handling people and concrete objects is not at all inferior on that account to the mind of the man who handles ideas and abstract conceptions."

"Measures of intelligence have in the past been chiefly those which would be favorable to the abstract thinker. The Alpha test, used in the Army, proved conclusively to those who studied the results most carefully, that fully half of our population can never succeed, even moderately, in the manipulation of abstract ideas. The large proportion of our boys and girls who come to school are absolutely doomed to be unsuccessful and to become discouraged in their attempts to progress in the courses which are commonly given, and yet the public supports these schools, and the administrators of these schools try to claim that they offer 'equal opportunity to all.' Actually the kind of opportunity

offered can be used effectively by only a small percentage of the pupils. Unless the child has the ability to interpret symbols and juggle ideas he is declared to be inferior and is forced out to learn for himself how to earn a living and to secure his rights."

A new point of view is needed in many a schoolroom if the right conception of social justice is to be established there. Thus the authors point out that "it is no disgrace for a blind man to be unable to paint a beautiful picture." Likewise it is a mistake to feel that "being a good valet or mule driver or boot black or street cleaner is a less respectable calling for a man whose mind demands concrete objects for its exercise than the expounding of the gospel or explanation of legal technicalities is to the man whose mind is inclined toward abstract ideas and relationships. If we are to have an effective social organization each person must do the type of thing for which his brain and his physical body fit him, without feeling that he is thereby either inferior or superior to any other person. We must help one another, each supplying that service for which he is best fitted. To continue as we have in the past, encouraging every child to look for a 'white-collar job' at the end of his educational career is to foster the monster of discontent and unrest which threatens to destroy the very foundations of modern society."

For the benefit of those who wish to use the Mentimeter tests in quantities, special booklets have been prepared by the authors and with these go stencils by means of which it is possible for a large number of papers to be scored in a very short time.

Some indication of the experience and knowledge of measurements lying back of the book is indicated by the records of both authors. Frank Parker Stockbridge is managing editor of *Popular Mechanics* and has a wide acquaintance with scientific and industrial affairs. Dr. M. R. Trabue is an assistant professor of Teachers College, Columbia University. He served as Chief Psychological Examiner in two large camps, and as a captain in the Adjutant General's Department measured the intellectual abilities of men in the aviation service. He is the author of the widely known Trabue Completion Tests.

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